



## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2022-0468; Project Identifier MCAI-2021-01243-T]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Airbus SAS Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The FAA proposes to supersede Airworthiness Directive (AD) 2018-13-08 which applies to certain Airbus SAS Model A318 series airplanes; Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes; Model A320-211, -212, -214, -216, -231, -232, and -233 airplanes; and Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes. AD 2018-13-08 requires repetitive inspections for cracking of the radius of the front spar vertical stringers and the horizontal floor beam on frame (FR) 36, repetitive inspections for cracking of the fastener holes of the front spar vertical stringers on FR 36, and repair if necessary, and, for certain airplanes, a potential terminating action modification of the center wing box area. Since the FAA issued AD 2018-13-08, Airbus has determined that additional airplanes are subject to the unsafe condition. This proposed AD would revise the applicability by adding airplanes and retain the requirements of AD 2018-13-08, as specified in a European Union Aviation Safety Agency (EASA) AD, which is proposed for incorporation by reference. The FAA is proposing this AD to address the unsafe condition on these products.

**DATES:** The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For material that will be incorporated by reference (IBR) in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu); Internet [www.easa.europa.eu](http://www.easa.europa.eu). You may find this IBR material on the EASA website at <https://ad.easa.europa.eu>. You may view this IBR material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0468.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0468; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, any comments received, and other information. The

street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Vladimir Ulyanov, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; phone 206-231-3229; email vladimir.ulyanov@faa.gov.

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include “Docket No. FAA-2022-0468; Project Identifier MCAI-2021-01243-T” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend the proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to <https://www.regulations.gov>, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this proposed AD.

**Confidential Business Information**

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is

important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Vladimir Ulyanov, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; phone 206-231-3229; email [vladimir.ulyanov@faa.gov](mailto:vladimir.ulyanov@faa.gov). Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

### **Discussion**

The FAA issued AD 2018-13-08, Amendment 39-19320 (83 FR 33809, July 18, 2018) (AD 2018-13-08) which applies to certain Airbus SAS Model A318 series airplanes; Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes; Model A320-211, -212, -214, -216, -231, -232, and -233 airplanes; and Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes. AD 2018-13-08 requires repetitive inspections for cracking of the radius of the front spar vertical stringers and the horizontal floor beam on FR 36, repetitive inspections for cracking of the fastener holes of the front spar vertical stringers on FR 36, and repair if necessary, and, for certain airplanes, a potential terminating action modification of the center wing box area. The FAA issued AD 2018-13-08 to address fatigue cracking of the front spar vertical stringers on the wings, which could result in the reduced structural integrity of the airplane.

### **Actions Since AD 2018-13-08 Was Issued**

Since the FAA issued AD 2018-13-08, Airbus has determined that Model A321 airplanes that have incorporated modification 160021 (structural reinforcement for Airbus SAS Model A321 airplanes sharklet installation) are also subject to the identified unsafe condition. In addition, Airbus determined that, for airplanes in configuration 5, 6, or 7, an optional modification of the center wing box after accumulating a certain number

of total flight cycles and total flight hours terminates the repetitive inspections.

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2021-0241, dated November 8, 2021 (EASA AD 2021-0241) (also referred to as the Mandatory Continuing Airworthiness Information, or the MCAI), to correct an unsafe condition for certain Airbus SAS Model A318 series airplanes; Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes; Model A320-211, -212, -214, -215, -216, -231, -232, and -233 airplanes; and Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes. EASA AD 2021-0241 supersedes EASA AD 2017-0099, dated June 8, 2017 (which corresponds to FAA AD 2018-13-08). Model A320-215 airplanes are not certificated by the FAA and are not included on the U.S. type certificate data sheet; this AD therefore does not include those airplanes in the applicability.

This proposed AD was prompted by a report that, during a center fuselage certification full-scale fatigue test, cracks were found on the front spar vertical stringer at a certain frame. This proposed AD was also prompted by a determination that Model A321 airplanes that have incorporated modification 160021 are also subject to the unsafe condition. The FAA is proposing this AD to address fatigue cracking of the front spar vertical stringers on the wings, which, if not corrected, could result in the reduced structural integrity of the airplane. See the MCAI for additional background information.

#### **Model A320-216 Airplanes**

The Airbus SAS Model A320-216 was U.S. type certificated on December 19, 2016. Before that date, any EASA ADs that affected Model A320-216 airplanes were included in the U.S. type certificate as part of the Required Airworthiness Actions List (RAAL). One or more Model A320-216 airplanes have subsequently been placed on the U.S. Register, and will now be included in FAA AD actions. For Model A320-216 airplanes, the requirements that correspond to AD 2018-13-08 were mandated by the

MCAI via the RAAL. Although that RAAL requirement is still in effect, for continuity and clarity the FAA has identified Model A320-216 airplanes in paragraph (c) of this proposed AD; the MCAI that is specified in paragraph (g) in this proposed AD includes retained requirements, which would therefore apply to those airplanes.

### **Explanation of Retained Requirements**

Although this proposed AD does not explicitly restate the requirements of AD 2018-13-08, this proposed AD would retain all of the requirements of AD 2018-13-08. Those requirements are referenced in EASA AD 2021-0241, which, in turn, is referenced in paragraph (g) of this proposed AD.

### **Related Service Information under 1 CFR Part 51**

EASA AD 2021-0241 describes procedures for repetitive special detailed inspections for cracking of the radius of the front spar vertical stringers, horizontal floor beam radius and fastener holes of the front spar vertical stringers on frame 36. EASA AD 2021-0241 further describes procedures for repetitive high frequency eddy current (HFEC) for cracking of the horizontal floor beam, repetitive HFEC inspections for cracking of the fastener holes of the front spar vertical stringers on FR 36, repetitive rototest inspections of the fastener holes of the spar vertical stringers, and repair. EASA AD 2021-0241 also describes procedures for the modification of the center wing box area. The modification is required for airplanes in configuration 1, 2 or 3; and for airplanes in configuration 5, 6, or 7, the modification is optional and is a terminating action for the repetitive inspections when done within a specified time frame. The modification includes related investigative and corrective actions. Related investigative actions include an HFEC inspection on the radius of the rib flanges, a rototest inspection of the fastener holes, detailed and HFEC inspections for cracking on the cut edges, detailed and rototest inspections on all open fastener holes, and an inspection to determine if secondary structure brackets are installed. Corrective actions include

reworking the secondary structure bracket and repair. This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

### **FAA's Determination and Requirements of this Proposed AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the State of Design Authority, the FAA has been notified of the unsafe condition described in the MCAI referenced above. The FAA is proposing this AD because the FAA evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

### **Proposed AD Requirements**

This proposed AD would require accomplishing the actions specified in EASA AD 2021-0241 described previously, as incorporated by reference, except for any differences identified as exceptions in the regulatory text of this AD.

### **Explanation of Required Compliance Information**

In the FAA's ongoing efforts to improve the efficiency of the AD process, the FAA developed a process to use some civil aviation authority (CAA) ADs as the primary source of information for compliance with requirements for corresponding FAA ADs. The FAA has been coordinating this process with manufacturers and CAAs. As a result, the FAA proposes to incorporate EASA AD 2021-0241 by reference in the FAA final rule. This proposed AD would, therefore, require compliance with EASA AD 2021-0241 in its entirety through that incorporation, except for any differences identified as exceptions in the regulatory text of this proposed AD. Using common terms that are the same as the heading of a particular section in EASA AD 2021-0241 does not mean that operators need comply only with that section. For example, where the AD requirement refers to "all required actions and compliance times," compliance with this AD

requirement is not limited to the section titled “Required Action(s) and Compliance Time(s)” in EASA AD 2021-0241. Service information required by EASA AD2021-0241 for compliance will be available at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0468 after the FAA final rule is published.

### **Costs of Compliance**

The FAA estimates that this proposed AD affects 1,549 airplanes of U.S. registry. The FAA estimates the following costs to comply with this proposed AD:

#### **Estimated costs for required actions**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Retained actions from AD 2018-03-08	Up to 273 work-hours X \$85 per hour = \$23,205	\$87,500	Up to \$110,705	Up to \$1,107,050 for certain airplanes*
New proposed inspections	25 work-hours X \$85 per hour = \$2,125	\$100	\$2,225	\$3,446,525
New proposed modification (5 airplanes)	Up to 403 work-hours X \$85 per hour = \$34,255	Up to \$316,900	Up to \$351,1555	Up to \$1,755,775

\* This estimate is based on the determination in AD 2018-13-08 that only 10 airplanes of U.S. registry needed to accomplish all required actions, including the modification; other airplanes were only required to accomplish the terminating actions.

#### **Estimated costs for optional actions**

<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>
Up to 409 work-hours X \$85 per hour = \$34,765	Up to \$66,050	Up to \$100,815

The FAA has received no definitive data on which to base the cost estimates for the on-condition actions specified in this proposed AD.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator.



Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Would not affect intrastate aviation in Alaska, and
- (3) Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

**§ 39.13 [Amended]**

2. The FAA amends § 39.13 by:

a. Removing Airworthiness Directive (AD) 2018-13-08, Amendment 39-19320; (83 FR 33809, July 18, 2018); and

b. Adding the following new AD:

**Airbus SAS:** Docket No. FAA-2022-0468; Project Identifier MCAI-2021-01243-T.

**(a) Comments Due Date**

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

This AD replaces AD 2018-13-08, Amendment 39-19320 (83 FR 33809, July 18, 2018) (AD 2018-13-08).

**(c) Applicability**

This AD applies to the Airbus SAS airplanes identified in paragraphs (c)(1) through (4) of this AD, certificated in any category, as identified in European Union Aviation Safety Agency (EASA) AD 2021-0241, dated November 8, 2021 (EASA AD 2021-0241).

(1) Model A318-111, -112, -121, and -122 airplanes.

(2) Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes.

(3) Model A320-211, -212, -214, -216, -231, -232, and -233 airplanes.

(4) Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes.

**(d) Subject**

Air Transport Association (ATA) of America Code 57, Wings.

**(e) Reason**

This AD was prompted by a report that, during a center fuselage certification full-scale fatigue test, cracks were found on the front spar vertical stringer at a certain frame. This AD was also prompted by a determination that Model A321 airplanes that have incorporated modification 160021 are also subject to the unsafe condition. The FAA is issuing this AD to address fatigue cracking of the front spar vertical stringers on the wings, which, if not corrected, could result in the reduced structural integrity of the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Requirements**

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, EASA AD 2021-0241.

**(h) Exceptions to EASA AD 2021-0241**

(1) Where EASA AD 2021-0241 refers to its effective date, this AD requires using the effective date of this AD.

(2) The “Remarks” section of EASA AD 2021-0241 does not apply to this AD.

(3) Where paragraph (3) of EASA AD 2021-0241 specifies actions for airplanes repaired “in accordance with instructions approved by EASA or approved under Airbus DOA,” for this AD use “using a method approved by the Manager, Large Aircraft Section, International Validation Branch, FAA; or EASA; or Airbus SAS’s EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.”

(4) Where paragraph (4) of EASA AD 2021-0241 specifies to “contact Airbus for approved corrective action instructions and accomplish those instructions accordingly” if cracks are detected, for this AD if any cracking is detected, the cracking must be repaired before further flight using a method approved by the Manager, Large Aircraft Section,

International Validation Branch, FAA; or EASA; or Airbus SAS's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

(5) Where paragraph (8) of EASA AD 2021-0241 specifies actions for airplanes inspected by additional instructions "approved before the effective date of this AD by Airbus DOA," for this AD use "approved before the effective date of this AD by the Manager, Large Aircraft Section, International Validation Branch, FAA; or EASA; or Airbus SAS's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature."

**(i) No Reporting Requirement**

Although the service information referenced in EASA AD 2021-0241 specifies to submit certain information to the manufacturer, this AD does not include that requirement.

**(j) Other FAA AD Provisions**

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, Large Aircraft Section, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the Large Aircraft Section, International Validation Branch, send it to the attention of the person identified in paragraph (k)(2) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(i) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(ii) AMOCs approved previously for AD 2018-13-08 are approved as AMOCs for the corresponding provisions of EASA AD 2021-0241 that are required by paragraph (g) of this AD.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, Large Aircraft Section, International Validation Branch, FAA; or EASA; or Airbus SAS's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(3) *Required for Compliance (RC)*: For any service information referenced in EASA AD 2021-0241 that contains RC procedures and tests: Except as required by paragraph (j)(2) of this AD, RC procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

**(k) Related Information**

(1) For information about EASA AD 2021-0241, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu); Internet [www.easa.europa.eu](http://www.easa.europa.eu). You may find this EASA AD on the EASA website at <https://ad.easa.europa.eu>. You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. This material may be found in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0468.

(2) For more information about this AD, contact Vladimir Ulyanov, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; phone 206-231-3229; email [vladimir.ulyanov@faa.gov](mailto:vladimir.ulyanov@faa.gov).

Issued on April 15, 2022.

Ross Landes, Deputy Director for Regulatory Operations,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

[FR Doc. 2022-08585 Filed: 4/21/2022 8:45 am; Publication Date: 4/22/2022]